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ABSTRACT

1.8

ENHANCED METHOD AND SYSTEM FOR PROGRAMMING A MOBILE TELEPHONE OVER THE AIR WITHIN A MOBILE TELEPHONE COMMUNICATION NETWORK

An improved method for programming a mobile telephone over the air within a mobile telephone communication network is disclosed. The mobile telephone communication network includes an over-the-air function, a customer service center, a mobile switching center, a base station controller, and multiple base transceiver stations. The over-the-air function, using the mobile switching center, the base station controller, and one of the base transceiver stations for transport, initially sends a request over the air to a mobile telephone within the mobile telephone communication network to interrogate the mobile telephone's protocol capability. In response to the request, the mobile telephone sends a protocol capability response message over the air back to the over-the-air function. The protocol capability response message includes a BAND_MODE_CAP field that describes the band and mode capability information of the mobile telephone. In addition, the protocol capability response message may also includes a SERVICE_OPTION field that describes the service options supported by the mobile telephone.